**Python Computer Science Checkpoint 2**

**Section A.** – Complete the following questions below using mathematics and python console interaction.

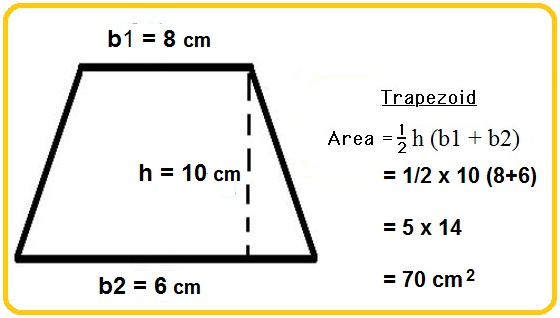
1. **Create a program that asks and prints out the following information (You must use addition, subtraction, multiplication, and division in this problem to achieve full marks):**

* What is your name?
* Who is your employer?
* How much money do you make an hour?
* How many hours do you work on average each week?
* Calculate and print how much this person earns in one week before taxes.
* Calculate and print how much this person earns in one week after taxes.
* Calculate and print how much this person earns in a year before taxes.
* Calculate and print how much this person earns in a year after taxes.
* Calculate and print how much this person earns in one month before taxes.
* Calculate and print how much this person earns in one month after taxes.
* Ask the user what their mortgage/rent payment is each month and then calculate and print how much money they have each month after making their monthly mortgage/rent payment.
* Ask the user how much money they hope to put into savings each month and then calculate and print how much money they will have left for the rest of the month.
* Ask the user for any extra income that they might make on the side each month and add it to their final monthly total.

**Concatenate all of this information in a final statement using strings and integers to produce a statement such as this:**

Hi Moe Syzlak. You work at Moe’s Tavern. Your hourly pay is $12.75. You work an average of 40 hours per week which would make your weekly pay before taxes $510.00. After paying taxes, you take home $357.00 per week. Each year you take home $26 520. Once you pay your taxes, you take home $18 564. Based on my calculations, your average monthly pay is $2040 before taxes. Once taxes kick in, you take home $1428 dollars. After you pay your rent of $640 dollars and put away $50 into savings each month, you will have $738 dollars left in your chequing account. You make an additional $40 dollars a month from odd jobs that puts your final earnings to $778 dollars.

1. Create a Python program that will calculate and print out the following type of problem. Make sure that you are using user input and aren’t just filling in the numbers below. The example below is there for you to use to make sure your calculations are correct.



**/20**

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| --- | --- | --- | --- | --- |
| **Grade** | **4**  **100-90** | **3**  **89-75** | **2**  **74-60** | **1**  **59-50** |
| **Criteria** | The program works and meets all of the specifications. The code is exceptionally well organized and very easy to follow.  The code is extremely efficient without sacrificing readability and understanding. The code incorporates all of the required criteria of the lab and more. Code uses complex items such as functions, multiple loops and color changes to solve the problem. | The program works and produces the correct results and displays them correctly. The code is fairly easy to read.  The code is fairly efficient without sacrificing readability and understanding. The code incorporates most of the required criteria for the lab. Code uses a function and loop to solve the problem. | The program produces correct results but does not display them correctly. The code is readable only by someone who knows what it is supposed to be doing.  The code is unorganized and it is difficult to navigate the page. The student did not include some of key elements required in the lab. Code uses functions to solve the problem. | The program is producing incorrect results. The code is poorly organized and very difficult to read.  The code uses incorrect tags and does not work in a browser.  The code includes a small amount of the required criteria. The code does not use functions, loops or color changes and is very basic. |

**Section B.** – Complete the 20 questions in the “Basic Python and Console Interaction” quiz and report your total mark to me.

**/20**

Section A \_\_\_\_\_\_\_**/20**

Section B \_\_\_\_\_\_\_**/20**

**Total Mark:** \_\_\_\_\_\_**/40**

**Total Percentage:** \_\_\_\_\_\_\_**%**